

# APPLICATION FOR FEDERAL ASSISTANCE

2001-K-211

OMB Approval No. 0348-0043

<b>1. TYPE OF SUBMISSION</b> Application <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction <input checked="" type="checkbox"/> Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction <input type="checkbox"/>		<b>2. DATE SUBMITTED</b> 04-26-2000	Applicant Identifier  																					
		<b>3. DATE RECEIVED BY STATE</b>	(State Application Identifier)																					
		<b>4. DATE RECEIVED BY FEDERAL AGENCY</b>	Federal Identifier																					
<b>5. APPLICANT INFORMATION</b>																								
Legal Name:		Organizational Unit: CA-NV Fish Health Center																						
Address (give city, county, State, and zip code): 24411 Coleman Fish Hatchery Rd. Anderson, CA 96007		Name and telephone number of person to be contacted on matters involving his application (give area code): J. Scott Foott 530-365-4271																						
<b>6. EMPLOYER IDENTIFICATION NUMBER (EIN):</b> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div>		<b>7. TYPE OF APPLICANT: (enter appropriate letter in box)</b>																						
<b>8. TYPE OF APPLICATION</b> <input type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) <div style="display: inline-block; width: 20px; height: 20px; border: 1px solid black; margin: 2px;"></div> <div style="display: inline-block; width: 20px; height: 20px; border: 1px solid black; margin: 2px;"></div> A. Increase Award    B. Decrease Award    C. Increase Duration D. Decrease Duration    Other (specify): _____		A State                      H. Independent School Dist. B. County                    I. State Controlled Institution of Higher Learning C. Municipal                J. Private University D. Township                K. Indian Tribe E. Interstate                L. Individual F. Intermunicipal          M. Profit Organization G. Special District        N. Other (Specify) <u>Fed. Govt.</u>																						
		<b>9. NAME OF FEDERAL AGENCY:</b> U.S. Fish and Wildlife Service																						
<b>10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER</b> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div>		<b>11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:</b> Health and Physiological Effects of Elevated Water Temperatures on Merced River Juvenile Chinook during the Parr-Smolt transformation.																						
<b>12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):</b> Merced & San Joaquin Counties, California																								
<b>13. PROPOSED PROJECT</b> Start Date      Ending Date		<b>14. CONGRESSIONAL DISTRICTS OF:</b> 18, 11																						
<b>15. ESTIMATED FUNDING</b>		<b>16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?</b>																						
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">a. Federal</td> <td style="width: 10%;">\$</td> <td style="width: 70%; text-align: right;">14,830<sup>00</sup></td> </tr> <tr> <td>b. Applicant</td> <td>\$</td> <td style="text-align: right;">5<sup>00</sup></td> </tr> <tr> <td>c. State</td> <td>\$</td> <td style="text-align: right;"><sup>00</sup></td> </tr> <tr> <td>d. Local</td> <td>\$</td> <td style="text-align: right;"><sup>00</sup></td> </tr> <tr> <td>e. Other</td> <td>\$</td> <td style="text-align: right;"><sup>00</sup></td> </tr> <tr> <td>f. Program Income</td> <td>\$</td> <td style="text-align: right;"><sup>00</sup></td> </tr> <tr> <td>g. TOTAL</td> <td>\$</td> <td style="text-align: right;">14,830<sup>00</sup></td> </tr> </table>		a. Federal	\$	14,830 <sup>00</sup>	b. Applicant	\$	5 <sup>00</sup>	c. State	\$	<sup>00</sup>	d. Local	\$	<sup>00</sup>	e. Other	\$	<sup>00</sup>	f. Program Income	\$	<sup>00</sup>	g. TOTAL	\$	14,830 <sup>00</sup>	a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW <b>ON</b> DATE _____ b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
a. Federal	\$	14,830 <sup>00</sup>																						
b. Applicant	\$	5 <sup>00</sup>																						
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e. Other	\$	<sup>00</sup>																						
f. Program Income	\$	<sup>00</sup>																						
g. TOTAL	\$	14,830 <sup>00</sup>																						
		<b>17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?</b> <input type="checkbox"/> Yes    If "Yes," attach an explanation. <input checked="" type="checkbox"/> No																						
<b>18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.</b>																								
i. Type Name of Authorized Representative J. Scott Foott		b. Title Project Leader	c. Telephone Number 530-365-4271																					
i. Signature of Authorized Representative 		e. Date Signed 7/18/00																						

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**PART E:** Certification Regarding Lobbying  
Certification for Contracts, Grants, Loans, and Cooperative Agreements

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~~CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND  
THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT;  
SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT~~

~~CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL  
LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR  
SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.~~

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will ~~be~~ paid, by or on behalf of the undersigned, ~~to any person for~~ influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, ~~or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement~~
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person ~~for~~ influencing or attempting to influence ~~an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.~~
- (3) The undersigned ~~shall~~ require ~~that~~ the language of this certification be included in ~~the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.~~

This certification is a material representation of fact upon which ~~reliance was~~ placed when this transaction ~~was~~ made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to ~~file~~ the required certification shall be ~~subject to a~~ civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified ~~certifications~~ are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

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TYPED NAME AND TITLE

---

DATE

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#### 4.5 PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Health & Physiological Effects of Elevated Water Temperatures on Juvenile Chinook  
Applicant Name: J. Scott Root  
Mailing Address: CA-NW Fish Health Center, 24411 Coleran Fish Hatchery Rd., Anderson, CA-96007  
Telephone: 530-365-4271  
Fax: 530-365-7150  
Email: scott\_root@nwfish.com

Amount of funding requested: \$ 14,830 for 1 years

Indicate the Topic for which you are applying (check only one **box**).

- |  |  |
|--|--|
| <input type="checkbox"/> Fish Passage/Fish Screens   | <input type="checkbox"/> Introduced Species                  |
| <input type="checkbox"/> Habitat Restoration         | <input checked="" type="checkbox"/> Fish Management/Hatchery |
| <input type="checkbox"/> Local Watershed Stewardship | <input type="checkbox"/> Environmental Education             |
| <input type="checkbox"/> Water Quality               |  |

Does the proposal address a specified Focused Action? ☒ yes ☐ no

What county or counties is the project located in? \_\_\_\_\_

Indicate the geographic area of your proposal (check only one **box**):

- |  |   |
|--|---|
| <input type="checkbox"/> Sacramento River Mainstem             | <input type="checkbox"/> East Side Trib: _____                  |
| <input type="checkbox"/> Sacramento Trib: _____                | <input type="checkbox"/> Suisun <del>Marsh</del> and Bay        |
| <input checked="" type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> North Bay/South Bay: _____             |
| <input type="checkbox"/> San Joaquin Trib: _____               | <input type="checkbox"/> Landscape (entire Bay-Delta watershed) |
| <input type="checkbox"/> Delta: _____                          | <input type="checkbox"/> Other: _____                           |

Indicate the primary species which the proposal addresses (check all that apply):

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon |  |
| <input type="checkbox"/> Winter-run chinook salmon  | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon   | <input type="checkbox"/> Fall-run chinook salmon   |
| <input type="checkbox"/> Delta smelt  | <input type="checkbox"/> Longfin smelt             |
| <input type="checkbox"/> Splittail  | <input type="checkbox"/> Steelhead trout           |
| <input type="checkbox"/> Green sturgeon   | <input type="checkbox"/> Striped bass              |
| <input type="checkbox"/> Migratory birds  | <input type="checkbox"/> All chinook species       |
| <input type="checkbox"/> Other: _____   | <input type="checkbox"/> All anadromous salmonids  |

Specify the ERP strategic objective and target (s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:

Artificial Fish Propagation, Page 421  
Water Quality (Temperature & Contaminants) Pages 64, 421

Indicate the type of applicant (check only one box):

- |  |  |
|--|--|
| <input type="checkbox"/> State agency                    | <input checked="" type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit                |
| <input type="checkbox"/> Local government/district       | <input type="checkbox"/> Private party             |
| <input type="checkbox"/> University                      | <input type="checkbox"/> Other: _____              |

Indicate the type of project (check only one box):

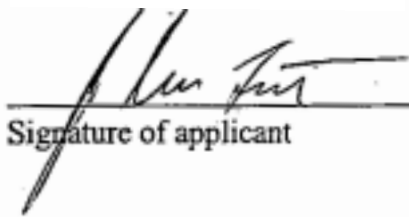
- |   |   |
|---|---|
| <input type="radio"/> Planning              | <input type="checkbox"/> Implementation |
| <input checked="" type="radio"/> Monitoring | <input type="checkbox"/> Education      |
| <input type="checkbox"/> Research           |   |

By signing below, the applicant declares the following:

- 1.) The truthfulness of all representations in their proposal;
- 2.) The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- 3.) The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

J. Scott Foott

Printed name of applicant

  
Signature of applicant



United *States* Department of the Interior

FISH AND WILDLIFE SERVICE  
CALIFORNIA-NEVADA FISH HEALTH CENTER  
24411 Coleman Fish Hatchery Road  
Anderson, CA 96007

CALFED Bay-Delta Program  
2001 Proposal Reviewers  
1416 Ninth St., Suite 1155  
Sacramento, CA 95814

May 8, 2000

Dear Sir / Madam,

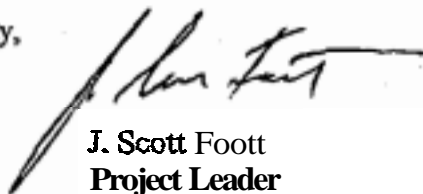
I believe that the Fish Health Center's two FY2001 research proposals;  
*Health monitoring of hatchery and natural fall-run chinook juveniles in the San Joaquin R. system and Delta* and

*Health and Physiological effects of elevated water temperatures on Merced R. juveniles chinook during the parr-smolt transformation: Daily fluctuation and range representative of spring water temperatures in the San Joaquin system and Delta*  
are exempt from the CALFED requirement for pre-project public notification. Neither of these research projects will involve local entities or require land use changes.

I have also been advised the FWS cannot agree to a 10% retention clause for State funded projects and have attached specific language regarding this matter (H. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS)..

Please contact me if there are any questions (530-365-4271). Thank you.

Sincerely,



J. Scott Foott  
Project Leader

D:\communications\calfednotificletter2001.wpd\may82000\jsf

## **H. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS**

The Fish and Wildlife Service (Service) cannot agree to a standard clause requested for State funded projects. Attachment D, Terms and Conditions for State Proposition 204 Funds, Section 3, states "Performance Retention: Disbursements shall be made on the basis of costs incurred to date, less ten percent of the total invoice amount. Disbursement of the ten percent retention shall be made either: (1) upon the Grantee's satisfactory completion of a discrete project task (ten percent retention for task will be reimbursed); or (2) upon completion of the project and Grantee's compliance with project closure requirements specified by CALFED (ten percent retention for entire project will be disbursed)".

The Service's authorization to enter into agreements with non Federal entities was changed in FY 2000. Our FY2000 Appropriations bill authorizes the Service to enter into contracts with State agencies when advance payment to the Service is not possible. In accordance with the requirements imposed by Congress in the FY2000 Appropriations bill and report language, the Service Director must approve a project when advance payment is not possible and certify that payments will be made in full by the State within 90 days after the Service issues an invoice.

Specifically, the 10% retention clause cannot allow timely payments for the following reasons: In our Federal Financial System (FFS) accounting program, a periodic invoice (either quarterly or monthly depending on the terms of the contract) is automatically issued from our finance center based on actual expenditures of the Service on a project. Invoices include a payment due date on the invoice and when payment is not received in full by that due date, the system automatically shows the unpaid balance as delinquent. Depending on how delinquent the payment is, interest, penalty and administrative charges may also accrue. With 10% retention withheld on each invoice, the 10% retention amount then causes applicable invoice record in FFS to be partly delinquent and remain delinquent until the project or individual tasks identified in the contract are completed and the retention is released.

The Service's Finance Center must report to the Department of Treasury if the Service is owed funds by any entity. Therefore, when accounts remain delinquent due to the 10% retention of payments owed the Service, that delinquency continues to be reported to Treasury.

The Service has previously entered into agreements with the State of California that do not contain the 10% retention clause. We have asked the State's Deputy Attorney General (see attached letter) to provide clarifying guidance to the Department of Water Resources that is general in scope, which can also be applied to contracts related to the CALFED program.

Our offices will continue to work with the State closely on State funded projects. If the State is not satisfied with the work performed by the Service, the State project manager should contact the Service's project manager to correct the performance problem. If needed, upon notification interim billings can be canceled until the State is satisfied with the Service's performance.

We can comply with all other State and Federal standard clauses.

# Health and Physiological Effects of Elevated Water Temperatures on Merced R. Juvenile Chinook during the Parr-Smolt transformation: Daily fluctuation and range representative of spring water temperatures in the San Joaquin River system and Delta

Primary Contact: J. Scott Foott, PhD  
U.S. Fish & Wildlife Service  
California - Nevada Fish Health Center  
24411 Coleman Hatchery Road  
Anderson, CA 96007

Phone: 530-3654271  
Fax: 530-365-7150  
Email: Scott-Foott@fws.gov

## Type of Organization / Tax status:

Federal Government / Tax exempt

## Executive Summary

This project will identify the extent of health and physiological dysfunction incurred by elevated spring water temperatures upon Merced River juvenile chinook (*Oncorhynchus tshawytscha*). Inadequate information on the effects of elevated temperatures, on a **local** stock of chinook which have evolved in the San Joaquin River System, reduces the confidence of water managers when modeling flow regimes for **smolt benefits**. Survival of these fish can be affected by sub-lethal physiological dysfunction during the critical parr-smolt transformation and the resultant drop in performance (predator avoidance, saltwater adaptation, immune function). The requested funds for this experiment total \$14,830 .

## Project Description

Juvenile chinook, acclimated to a moderately high temperature (19 °C), will be subjected to **2** temperature regimes at the time of their presumed parr-smolt transformation. Temperature regimes will fluctuate in a diurnal pattern in an attempt to simulate river conditions. The **low** regime will range from 17 - 20 °C while the high regime will have a range of 19 - 23 °C. These temperature regimes were selected from the range of surface measurements recorded in the April - June 30 period during **8** year's of biosampling efforts (Interagency Ecological Program {IEP} database rm 41 - 51, 1992 - 1999). Test fish will be evaluated for smolt development, immunodefenses, and recovery from stress over a 3 week period. Quarterly and a final report would be

produced by the principal investigator as well as oral presentation(s) of the study results.

#### Location

Juvenile Fall-run Chinook will come from the California Department of Fish & Game {CDFG} Merced River Fish Facility (MRFF) and the experiments conducted at the CA-NV Fish Health Center (FHC) Wet laboratory (Anderson, CA).

#### Ecological/ Biological Objectives

Declining chinook populations in the Central Valley has prompted an intense restoration effort of this valuable resource and a key element of the State's aquatic biodiversity. Health and fitness of juvenile salmon out-migrants ("smolts") are major determinates of their performance and survival. Contaminants and elevated water temperature have been identified in the CALFED process as stressors for salmonids in the San Joaquin River and Delta. Both of these stressors would have the potential for immuno-suppressive and developmental effects. Flow manipulations, to alter water temperatures at critical life stages, are one option for system changes to enhance salmonid survival.

#### Linkage

This project is primarily directed at the topic of water quality (i.e. evaluation of the biological processes governed by stream temperature, Feb. 1999 revised ERP Vol. 1 and 2, pg 64), however, it also addresses another ERP topic: fish management/hatchery operations *of a CALFED priority species* (pg 421, Artificial Fish Propagation). This aspect is reflected in the role water temperature plays in release timing decisions from MRFF.

#### Systemwide ecosystem benefits

Data from this project will complement the quantitative efforts of the IEP bio-sampling program by providing qualitative insight into the health effects of elevated temperatures on the survival potential of the system's juvenile chinook population. Data can also be used by the CDFG in development of optimal hatchery operations for the basin.

#### Technical feasibility and Timing

This project will require 900 juvenile chinook from the MRFF. Permission from CDFG for such a transfer has been requested by the primary investigator.

#### Methodology

In late March, 900 parr will be moved from MRFF to the CA-NV FHC's wet lab and gradually acclimated to 19°C over a 10 day period. Equally numbers of fish will be allocated to 2 sets of replicate tanks. One replicate group will be exposed to a diurnal temperature fluctuation of 17 - 20°C while the other group will experience a fluctuation



of 19 – 23 °C. Fish will be fed to satiation daily with a diet of tubifex worms and freeze-dried krill to simulate a switch to a natural diet. Water temperature, ammonia, pH, dissolved oxygen, and mortality will be monitored throughout the experiment. A suite of assays will be performed on fish from each group on day 0, 7, 14, and 21 following the initial temperature fluctuation:

Recovery from stress: Before and 1 hour after two 30 second net stress events (within 10 minutes), plasma glucose response and blood ion content will be evaluated in the groups. The ability to return to a normal plasma profile will be evaluated after 24 hours.

Immunodefenses: Plasma protein changes (immunoglobulin, etc) will be evaluated by electrophoretic profiles. Circulating leukocyte numbers will be estimated from leukocrit data and phagocyte number will be tested by the Nitroblue tetrazolium assay with cells from the spleen and anterior kidney. Groups of 25 fish will be challenged with *Flavobacterium columnare* (an endemic bacterial pathogen which causes mortality in summer out-migrants) to determine disease resistance.

Smolt Development: Ability to adapt to seawater will be tested in a progressive (18, 22, 28 ppt) 3 day saltwater challenge. Performance measurements include survival, dehydration, plasma sodium and osmolality, and gill ATPase activity. Growth, histological changes to select organs, and % lipid will also be monitored.

#### Local involvement

No local entity involvement or impacts are foreseen.

#### Cost

Total request for the project is \$14,830. Categorical breakdown is as follows:

Personnel:

**GS4** (temp. **FTE**) and **GS7** (50% time) biologists \$10,000

Supplies / power costs: \$ 4,400

3% FWS overhead charge \$ 430

Table 3. Budget

task		/bene.	service contracts	materials	misc.	O/H 3%	total
1.		\$1000	\$0	\$4000	\$ 0	\$150	\$5150
2		\$4000	\$0	\$0	\$400	\$132	\$4532
3		\$4600	\$0	\$0	\$0	\$138	\$4738
4		\$ 400	\$0	\$0	\$0	\$12	\$412
<b>totals</b>	800hr	\$10,000	\$0	\$4,000	\$400	\$432	\$14832

Table 4. Quarterly Budget

task	oct-dec99	jan-mar00	apr-jun00	jul-sep00	oct-dec00	totals
1	\$0	\$5150	\$0	\$0	\$0	\$5150
2	\$0	\$0	\$4530	\$0	\$0	\$4530
3	\$0	\$0	\$4740	\$0	\$0	\$4740
4	\$0	\$0	\$ 410	\$0	\$0	\$410

#### Schedule

Task 1	Acquire supplies / hire & train technician / test system	March 1, 2001
Task 2	Transport fish / acclimate / run study	April - May 2001
Task 3	Perform lab assays, analyze data	April - June 2001
Task 4	Prepare quarterly & final report	June 30 & Sept 30, 2001 for final report
Task 5	Present data for CALFED cooperators	Oct 2001

#### Cost-sharing

Principle investigator salary for project estimated \$4000.

#### Applicant Qualifications

John Scott Foott

#### Education

PhD, Comparative Pathology 1989 University of California, Davis  
 B.S. Biol. Sciences (Marine Biol.) 1982 California Polytechnic State University, San Luis Obispo

#### Professional Experience

USFWS	1989-present	Fish Health Biologist & Project Leader
Idaho Dept. Fish & Game	1987-89	Fishery Pathologist

Two controlled laboratory studies on elevated temperature effects on Trinity R. juvenile chinook smolts were conducted at the FHC in June of 1998 and 1999 (reports pending). Smolt development of fish held at the higher temperatures (21- 24°C) were inhibited and cumulative mortality higher than low temperature groups (17 - 20°C). Experience learned from these studies have been incorporated into the design of the proposed study.

Health and Physiological effects of elevated water temperatures on Merced R. juveniles chinook during the parr-smolt transformation: Daily fluctuation and range representative of spring water temperatures in the San Joaquin system and Delta

## Environmental Compliance Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. tions and  
include them with the application will result in the application being considered nonresponsive and not  
considered for funding.

1. Do any of the actions included in the proposal require compliance with either the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or both?

YES

**X.**  
NO

2. If you answered yes to # 1, identify the lead governmental agency for CEQA/NEPA compliance.

Lead Agency

3. If you answered no to # 1, explain why CEQA/NEPA compliance is not required for the actions in the proposal.

*No land use or water manipulation. Research on Merced R. Fish Facility chinook with the approval of CDFG.*

4. If CEQA/NEPA compliance is required, describe how the project will comply with either or both of these laws. Describe where the project is in the compliance process and the expected date of completion.

5. Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal?

YES

**X**  
NO

If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide access needs and permission for access with 30 days of notification of approval.

6. Please indicate what permits or other approvals may be required for the activities contained in your proposal. Check all boxes that apply.

**LOCAL**

Conditional use permit

Variance

Subdivision Map Act approval

Grading permit

General plan amendment

Specific plan approval

Williamson Act Contract

Other

(please specify)

None required

CESA Compliance

Streambed alteration permit

CWA § 401 certification

Coastal development permit

Reclamation Board approval

Notification

Other

(please specify)

None required

**FEDERAL**

ESA Consultation

Rivers &amp; Harbors Act permit

CWA § 404 permit

Other

(please specify)

None required

(CDFG)

(CDFG)

(RWQCB)

(Coastal Commission/BCDC)

(DFC/BCDC)

(USFWS)

(ACOE)

(ACOE)

CESA = California Endangered Species Act  
 USFWS = U.S. Fish and Wildlife Service  
 ACOE = U.S. Army Corps of Engineers

ESA = Endangered Species Act  
 CDFG = California Department of Fish and Game  
 RWQCB = Regional Water Quality Control Board  
 BCDC = Bay Conservation and Development Commission

## Land Use Checklist

All applicants must fill out this Land Use Checklist for their proposal. Applications must contain answers to the following questions to be responsive and to be considered for funding. Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.

1. Do the actions in the proposal involve physical changes to the land (i.e. grading, planting vegetation, or breaching levees) or restrictions in land use (i.e. conservation easement or placement of land in a wildlife refuge)?

YES

~~NO~~

2. If NO to # 1, explain what type of actions are involved in the proposal (i.e., research only, planning only).

*Research only*

3. If YES to # 1, what is the proposed land use change or restriction under the proposal?

4. If YES to # 1, is the land currently under a Williamson Act contract?

YES

NO

5. If YES to # 1, answer the following:

Current land use

Current zoning

Current general plan designation

6. If YES to #1, is the land classified as Prime Farmland, Farmland of Statewide Importance or Unique Farmland on the Department of Conservation Important Farmland Maps?

YES

NO

DON'T KNOW

7. If YES to # 1, how many acres of land will be subject to physical change or land use restrictions under the proposal?

8. If YES to # 1, is the property currently being commercially farmed or grazed?

YES

NO

9. If YES to #8, what are

the number of employees/acre \_\_\_\_\_  
the total number of employees \_\_\_\_\_

10. Will the applicant acquire any interest in land under the proposal (fee title or a conservation easement)?

YES

~~NO~~

11. What entity/organization will hold the interest? \_\_\_\_\_

12. If YES to # 10, answer the following:

Total number of acres to be acquired under proposal \_\_\_\_\_  
Number of acres to be acquired in fee \_\_\_\_\_  
Number of acres to be subject to conservation easement \_\_\_\_\_

13. For all proposals involving physical changes to the land or restriction in land use, describe what entity or organization will:

manage the property \_\_\_\_\_

provide operations and maintenance services \_\_\_\_\_

conduct monitoring \_\_\_\_\_

14. For land acquisitions (fee title or easements), will existing water right

YES

15. Does the applicant propose any modifications to the water right or change in the delivery of the water?

YES

~~NO~~

16. If YES to # 15, describe \_\_\_\_\_